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Schematics Location

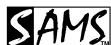
Television 2A, 2B
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Placement Chart

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PHILIPS MAGNAVOX

Models

PR1390C121
PR1319C121
PR1391X121
PR1920C125
13PR19C121

SCHEMATIC NOTES

For SAFETY use only equivalent replacement part,

✕ Circuitry not used in some versions.

--- Circuitry used in some versions.

⏏ Ground

⏏ Chassis ground

▽ Common tie point

△ Taken from common tie point

3 Schematic voltage source tie point.

A Cabling: Heavy lines reduce use of multiple lines.

Waveforms and voltages are taken from ground, unless noted otherwise.

Waveforms taken with triggered scope and keyed rainbow generator. Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.

Supply voltages maintained as seen at input.

Voltages measured with digital meter and a 1000µV RF signal, with colorbar pattern, applied to antenna terminal.

Controls adjusted for normal operation.

Capacitors are 50 volts or less, 5% or greater unless noted.

Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.

Resistors are 1/2W or less, 5% or greater unless noted.

Value in () used in some versions.

Measurements with switching as shown, unless noted.

Rated voltage shown on zener diodes.

PARTS LIST

COILS & TRANSFORMERS

Item No.	Function/Rating	Mfr. Part No.
# DG200 (1)	Degaussing	3139 128 23671
# DG200 (2)	Degaussing	3139 158 23691
FB5342	Ferrite Bead	3198 018 90010
FB5502	Ferrite Bead	3198 018 90010
FB5516	Ferrite Bead	4835 157 67078
FB5550	Ferrite Bead	4835 157 67078
FB5552	Ferrite Bead	3198 018 90010
FB5572	Ferrite Bead	3198 018 90010
FB5573	Ferrite Bead	4835 157 67078
# L405 (1)	Yoke Horiz 2mH Vert 28mH	4835 150 17158
# L405 (2)	Yoke	4835 150 17145
L5004	82μH	3198 018 18270
L5202	12μH	3198 018 11290
L5341 (1)	6.8μH	3198 018 26880
L5341 (2)	1.5μH	3198 018 21580
L5404 (1)	56μH	2422 535 94887
L5404 (2)	27μH	2422 535 94888
L5405	27μH	4835 157 67052
L5408	15μH	2422 535 95388
L5410	27μH	4835 157 67052
L5521	2.2μH	3198 018 12280
L5540	4.7μH	3198 018 14780
L5551	27μH	4835 157 67052
L5571	22μH	3198 018 22290
L5603	6.8μH	3198 018 16880
L5604	4.7μH	2422 535 95662
LC5500	Line Filter	4835 152 17011
T5444	Horizontal Drive	3112 338 30882
# T5445 (3)	Horizontal Output	3128 138 20701
# T5545 (1)	Power	2422 531 02311
# T5545 (2)	Power	2422 531 02308

For SAFETY use only equivalent replacement part.

(1) Used in models PR1319C121, PR1390C121, PR1391X121, and 13PR19C121.

(2) Used in model PR1920C125.

(3) Screen and focus controls are part of T5445.

PARTS LIST continued

MISCELLANEOUS

Item No.	Description	Mfr. Part No.	Notes
# F1500	Fuse	2422 086 10869	4AMP, 250V, Fast Acting
# F1571	Fuse	4835 253 97162	1AMP, 250V
# F1572	Fuse	2422 086 10584	800mA, 65V
M0223 (2)(3)	Jack	2422 026 04964	Assembly
M0232 (2)(3)	Jack	2422 026 04747	Headphone
# M0254 (1)(2)(3)(5)	Socket	2419 501 06009	CRT
# M0254 (4)	Socket	2422 500 80022	CRT
# P1500 (1)(2)(5)	Line Cord	3135 010 04751	AC, Polarized
# P1500 (3)	Line Cord	3135 010 07291	AC, Polarized
# P1500 (4)	Line Cord	3135 010 04771	AC, Polarized
RL1580 (4)	Relay	2422 132 07317	Degaussing
RM7680	Receiver	9322 127 53667	Remote (GP1U28QP)
SP1 (2)(3)	Speaker	2422 264 00336	3" Round, 25 Ohms, 1.5W
SP1 (1)(4)(5)	Speaker	2422 264 00328	1 1/4" X 3 1/2", 25 Ohms, 1.5W
SW1680	Switch	2422 128 02742	Volume Down
SW1681	Switch	2422 128 02742	Volume Up
SW1682	Switch	2422 128 02742	Channel Down
SW1683	Switch	2422 128 02742	Channel Up
SW1684	Switch	2422 128 02742	Power
TU1000 (6)	Tuner	2422 542 90057	UHF/VHF
# V1010 (1)(2)(3)(5)	CRT	-	A34EJM34X113
	CRT	9301 807 80304	A34EEC34X113
# V1010 (4)	CRT	9322 132 79682	A48KRD89X03
X1001	Filter	2422 549 42501	4.5MHz
X1003	Filter	2422 549 42433	4.5MHz
X1200	Trap	2422 549 40807	4.5MHz
X1208	Crystal	2422 543 00832	3.58MHz
X1600	Crystal	2422 543 00488	12MHz
	Magnet (1)(2)(3)(5)	4835 150 27007	Purity/Convergence
	Magnet (4)	4835 150 27008	Purity/Convergence
	PC Board (5)	00EME801	Main
	PC Board (2)(3)	00EME802	Main
	PC Board (1)	00EME803	Main
	PC Board (4)	00EME836	Main
	Transmitter (1)(2)(4)(5)	3139 228 81451	Remote, RC282901/04
	Transmitter (3)	3139 228 81461	Remote, RC282901/04W

For SAFETY use only equivalent replacement part.

(1) Used in model PR1319C121 .

(2) Used in model PR1390C121.

(3) Used in model PR1391X121.

(4) Used in model PR1920C125.

(5) Used in model 13PR19C121.

(6) Contact TNI Electronics for replacement; order by manufacturer's part number.

PARTS LIST continued

CONTROLS & RESISTORS

Item No.	Function/Rating	Mfr. Part No.
# R3207	3.3 5% 1/3W	2306 204 03338
# R3314	18K 5% 3W	2322 195 63183
# R3316	220 5% 1/3W	2306 204 03221
# R3324	18K 5% 3W	2322 195 63183
# R3326	220 5% 1/3W	2306 204 03221
# R3334	18K 5% 3W	2322 195 63183
# R3336	220 5% 1/3W	2306 204 03221
# R3347	1000 5% 1/3W	4835 116 57663
# R3349, 50	1.2 5% 1/3W	-
	1 5% 1/3W	4822 111 30483
# R3400	4700 5% 3W	2322 195 63472
# R3404	12K 5% 1/3W	2306 204 03123
# R3407	220 5% 3W	2322 195 63221
# R3411, 12	1 5% 1/3W	4822 111 30483
# R3416	3.9 5% 1/3W Fusible	-
	4.7 Fusible	2306 207 03398
# R3417	1 5% 1/2W	4835 110 27012
R3418 (1)	200K 1% 1/2W	2322 156 22004
R3418 (2)	120K 1% 1/2W	2322 156 21204
R3419 (1)	82K 1% 1/2W	2322 156 28203
R3419 (2)	47K 1% 1/2W	2322 156 24703
R3460	2200 1% .6W	4835 116 57676
# R3463	1.5 5% 1/3W	4835 116 57664
R3464	2200 1% .6W	4835 116 57676
R3465 (1)	5.6 1% .6W	2322 156 25608
R3465 (2)	3.9 1%	2322 156 23908
R3466 (1)	5.6 1% .6W	2322 156 25608
R3466 (2)	4.7 1% .6W	2322 156 24708
# R3474	22 5% 3W	2322 195 63229
# R3506	2.2 5% 5W Wirewound	4835 112 27037
# R3509	100 5% 5W Wirewound	2322 251 41101
# R3510	33K 5% 3W	2322 195 63333
# R3518	.33 5% 3W	2120 106 90551
# R3525	22 5% 1/3W	2306 204 03229
# R3541	47 5% 2W	2322 194 63479
R3616	8200 X 12 Network	4835 111 97048
R3617	8200 X 6 Network	4835 111 97047
R3624	2200 5% X 7 Network	2120 108 93868
TH3503	10.4 Cold PTC	4835 116 47001
VR3540	4700 B+	2120 368 90122

For SAFETY use only equivalent replacement part.

(1) Used in models PR1319C121, PR1390C121, PR1391X121, and 13PR19C121.

(2) Used in model PR1920C125.

PARTS LIST continued

CAPACITORS & ELECTROLYTICS

Item No.	Rating	Mfr. Part No.
# C2341	.0022 10% 1kV	2020 558 90571
C2405	470pF 10% 2kV	4835 122 47638
C2406	.0047 10% 1kV	2020 558 90495
C2407 (1)	.0082 5% 1.6kV	2222 375 90152
C2407 (2)	.01 5% 1.6kV	2222 375 90154
C2416 (1)	680pF 10% 2kV	4835 122 47584
C2416 (2)	560pF 10% 2kV	2020 558 90484
C2500	.47 275VAC	-
	.47 250VAC	4835 122 47569
C2502, 04, 05	.0022 10% 1kV	3198 019 52220
C2509, 10	.001 10% 1kV	2020 558 90473
C2518	470pF 10% 1kV	2020 558 90471
C2531	560pF 2% 50V	2020 552 93727
# C2545	.0015 250VAC	4835 122 47622
C2550	.001 10% 1kV	2020 558 90473

For SAFETY use only equivalent replacement part.

(1) Used in models PR1319C121, PR1390C121, PR1391X121, and 13PR19C121.

(2) Used in model PR1920C125.

PARTS LIST continued

CABINET PARTS

Item	Mfr. Part No.
------	---------------

Model PR1319C121 and 13PR19C121

Button Power	3139 124 27601
Buttons Control	3139 124 27441
Cabinet Front	3139 137 60631
Cabinet Rear	3139 124 27551
Light Guide	3139 124 29161

Model PR1390C121 and PR1391X121

Button Power	3135 014 00651
Buttons Control	3135 014 00761
Cabinet Front	3135 017 03921
Cabinet Rear	3135 014 08321
Light Guide	3111 254 24131

Model PR1920C125

Button Power	3139 124 27601
Buttons Control	3139 124 27441
Cabinet Front	3139 137 61031
Cabinet Rear	3139 124 28931
Light Guide	3139 124 27451

SEMICONDUCTORS

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	ECG Part No.
D6212 Thru			
D6215	1N4148	4835 130 37048	ECG519
D6311, 21, 31, 41	BAV21	4822 130 30842	ECG177
D6342	1N4148	4835 130 37048	ECG519
D6400, 01	1N4148	4835 130 37048	ECG519
D6402	BYD33D	4835 130 37009	ECG569
D6404	BYD33M	4835 130 37957	ECG571
D6405	BYD33D	4835 130 37009	ECG569
D6406	1N4148	4835 130 37048	ECG519
D6409, 10, 12	BYD33D	4835 130 37009	ECG569
D6414, 15	BAS216	4835 130 37905	-
D6418, 19	1N4148	4835 130 37048	ECG519
D6431	BAV21	4822 130 30842	ECG177
D6432	1N4148	4835 130 37048	ECG519
D6435	BAS216	4835 130 37905	-
D6460	BYD33D	4835 130 37009	ECG569
D6502 Thru			
D6505	1N5062	4822 130 41275	ECG506
D6507, 08	BYD33J	4835 130 37094	ECG569
D6520, 21	1N5062	4822 130 41275	ECG506
D6537, 40	BAV21	4822 130 30842	ECG177
D6550	BY229X-600	9340 380 20127	-
D6560	BYV27-200	9322 126 72673	ECG588
D6570	EGP20DL-530	4835 130 37919	-
D6584, 85, 90 (1)	BAS216	4835 130 37905	-
IC7010	L78M05CP	9322 028 93682	ECG1960
IC7250	TDA8846S1	-	-
	TDA8846N2/S1	9352 620 26112	-
IC7460	TDA9302H	4835 209 88531	-
IC7520	MC44603A	4835 209 88537	-
IC7600	SA45543PS/M4/1046	9352 645 55112	-
IC7601	24W04-6	-	-
	ST24W04B6	9322 097 23682	-
IC7607	NE555D	9336 561 10623	ECG955SM
IC7954	TDA7052B/N1	4835 209 88542	-
LD6680	LTL-307P	4835 130 97096	-
Q7206	BC857B	5322 130 60508	ECG2409
Q7256, 66	BC847B	4822 130 60511	ECG2408
Q7311, 12	BF422	9332 593 50126	ECG399
Q7313	BF423	9332 593 60126	ECG288
Q7321, 22	BF422	9332 593 50126	ECG399
Q7323	BF423	9332 593 60126	ECG288
Q7331, 32	BF422	9332 593 50126	ECG399
Q7333	BF423	9332 593 60126	ECG288
Q7400	BF422	9332 593 50126	ECG399
Q7401	BC857B	5322 130 60508	ECG2409
Q7402	BUT11APX	9340 552 58127	-
Q7403	BC847B	4822 130 60511	ECG2408
Q7404, 31	BC857B	5322 130 60508	ECG2409
Q7469	BC847B	4822 130 60511	ECG2408
Q7518	TP6NA60FI	4835 130 48109	ECG2947
Q7590, 91 (1)	BC847B	4822 130 60511	ECG2408
Q7602	BD135-16	9332 696 70127	ECG373
Q7605	BC847B	4822 130 60511	ECG2408
Q7608	PMBT2369	3198 010 43360	ECG2406
Q7609, 10, 11	BC847B	4822 130 60511	ECG2408
Q7612	BD135-16	9332 696 70127	ECG373
Q7620	BC547B	4835 130 47055	ECG123AP
Q7621	BC847B	4822 130 60511	ECG2408
Q7951, 52, 55	BC847B	4822 130 60511	ECG2408
Q7956	BC857B	5322 130 60508	ECG2409
ZD6007	BZX79-C33	4835 130 37904	ECG5036A
ZD6343	BZX284-C8V2	4835 130 37922	-
ZD6408	BZX79-F6V2	9337 242 70133	ECG5013T1
ZD6413	BZX79-C12	3198 010 21290	ECG5021A
ZD6461	BZX79-C33	4835 130 37904	ECG5036A
ZD6600	BZX284-C3V9	9340 385 80115	-
ZD6601	BZX284-C6V8	9340 386 40115	-
ZD6612	BZX79-F6V8	3198 010 36880	-
ZD6669	BZX79-C5V1	3198 010 25180	ECG5010A
ZD6953	BZX284-C3V3	9340 385 60115	-

(1) Used in model PR1920C125.

B



D

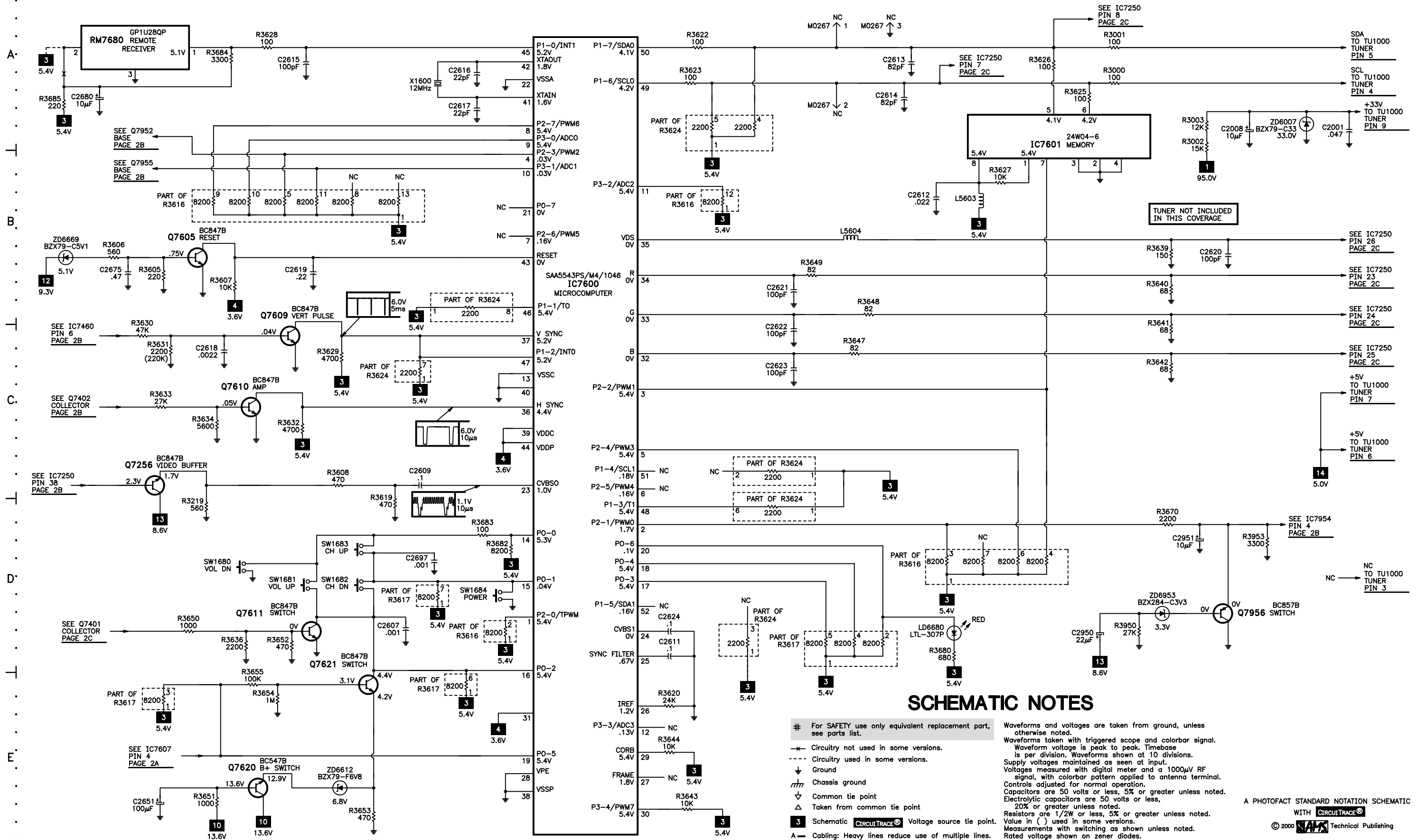


E

G

SYSTEM CONTROL SCHEMATIC

H



MAIN BOARD - TOP VIEW

